Application No. Applicant(s) Index of Claims TANAKA ET AL. 10/734,169 Examiner Art Unit Mark Hellner 3663 (Through numeral) Cancelled Rejected Non-Elected **Appeal** N Α 0 **Objected** Allowed Restricted Interference

|              |          | <u> </u> |          |               |              |              | ,        |            | لـــا   |           |          |            |  |          |   |              | _                                   |                 |          |          |          |            |            |                |          | -        |          |          |          |          |           |
|--------------|----------|----------|----------|---------------|--------------|--------------|----------|------------|---|-----------|----------|------------|--|----------|---|--------------|-------------------------------------|-----------------|----------|----------|----------|------------|------------|----------------|----------|----------|----------|----------|----------|----------|-----------|
| Cla          | im       | Date     |          |               |              |              |          |            |   |           | Cla      | Claim Date |  |          |   |              |                                     | Cla             | aim      | Date     |          |            |            |                |          |          |          |          |          |          |           |
|              | =        |          |          |               |              |              |          |            |   |           |          | =          |  |          |   |              |                                     |                 |          |          |          |            |            |                |          |          |          |          | П        |          |           |
| Final        | Original | 8/31/04  |          |               |              |              |          |            |   |           | Final    | Original   |  |          |   |              |                                     |                 |          |          | Final    | Original   |            |                | Н        |          |          |          |          |          |           |
| 這            | Örić     | 8        |          |               |              |              |          |            |   |           | 🖫        | Ç          |  |          | 1   |              |                                     |                 |          |          | i.       | Örič       |            |                |          |          |          |          |          |          |           |
|              |          | _        |          |               | L            | _            | L        | L          |   |           |          |            | Ш  | _        | _   |              |                                     |                 | _        |          | <u> </u> |            |            | Ш              |          |          |          |          | 4        | 4        | _         |
| <u> </u>     | 1        | =        |          |               |              |              |          | <u>L</u> . | Щ   | _         |          | 51         | Н  | $\perp$  | 4   | _            | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | $\sqcup$        | 4        | _        | <u> </u> | 101        |            | Щ              | Ш        |          |          |          | 4        | _        | _         |
|              | 2        | =        |          |               | $oxed{oxed}$ | _            | <u> </u> | _          | Ш   | _         | <u> </u> | 52         | $\vdash$   | -        | -   | -            | ┡                                   | $\dashv$        | $\dashv$ | _        |          | 102        | _          | Ш              | Ш        | -        |          | $\dashv$ | 4        | $\dashv$ | 긕         |
|              | 3        | =        | _        | _             | _            | <u> </u>     | <u> </u> | ┡          | Н   | _         | <u> </u> | 53         | $\vdash \vdash$  | $\dashv$ | +   | _            | _                                   | $\dashv$        | -        | _        | <u> </u> | 103        | _          | $\vdash$       | Н        | _        | -        | $\dashv$ | $\dashv$ | $\dashv$ | 괵         |
|              | 4        | =        | _        | _             |              | H            | ⊢        | ├          | $\vdash$  | $\dashv$  | <u> </u> | 54         | $\vdash$   | +        | +   | +            | <u> </u>                            | -               |          | _        |          | 104<br>105 | -          | Н              | Н        | _        | -        | -        | $\dashv$ | $\dashv$ | ᅴ         |
|              | 5        | =        | Н        | _             | $\vdash$     | $\vdash$     | ├        | -          | -   |           |          | 55<br>56   | $\vdash$   | $\dashv$ | +   | +            | -                                   |                 | -+       | -        | -        | 105        |            | H              | Н        |          |          |          | -+       | $\dashv$ | ᅱ         |
| <b>-</b>     | 7        | =        | -        |               |              |              | -        | _          |   | $\dashv$  | <u> </u> | 57         | H  | $\dashv$ | +   | -            | -                                   | $\dashv$        | ┥        |          | -        | 107        |            | Н              | Н        |          |          |          | $\dashv$ | -+       | ᅥ         |
|              | 8        | F        | -        |               | $\vdash$     | $\vdash$     | ⊢        | $\vdash$   | Н   | $\dashv$  | $\vdash$ | 58         | $\vdash$   | +        | +-  | +-           | $\vdash$                            | -               | -        |          |          | 108        | _          | Н              | Н        | _        | =        |          | $\dashv$ | $\dashv$ | $\dashv$  |
|              | 9        | -        |          | _             |              |              | $\vdash$ | $\vdash$   | Н   | $\dashv$  |          | 59         | $\vdash$   | +        | +   | +            |                                     | $\vdash$        | ┪        |          |          | 109        |            | H              | Н        | _        | -        | $\dashv$ | $\dashv$ | $\dashv$ | ᅥ         |
|              | 10       | -        | $\vdash$ | _             | $\vdash$     |              | $\vdash$ | ┢          | $\vdash$  | $\dashv$  | -        | 60         |  | 十        | +   | +            | $\vdash$                            | $\vdash$        | 十        | $\dashv$ |          | 110        | Н          | Н              | Н        |          | -        |          | $\dashv$ | $\dashv$ | $\dashv$  |
| Н            | 11       | H        | Н        |               | Н            | $\vdash$     | $\vdash$ | Т          | Н   | $\dashv$  |          | 61         | $\vdash$   | 十        | $\top$  | $\top$       |                                     | $\vdash$        | 一        | $\dashv$ |          | 111        |            | Н              | П        |          |          | $\dashv$ | $\dashv$ | ヿ        | ᅱ         |
|              | 12       | $\vdash$ | $\vdash$ | $\overline{}$ | $\vdash$     |              | Г        | Г          | Н   | $\dashv$  |          | 62         | $\Box$   | 十        | +   | +            | $\Box$                              |                 | 7        |          |          | 112        |            | М              | П        | $\neg$   |          |          | $\dashv$ | $\dashv$ | $\exists$ |
|              | 13       | Π        |          |               |              |              | Γ        | Г          | П   | $\neg$    |          | 63         | П  | 一        | $\top$  | 1            |                                     |                 |          | $\neg$   |          | 113        |            |                |          |          |          |          | $\Box$   | $\Box$   |           |
|              | 14       |          |          |               |              |              |          |            |   |           |          | 64         |  |          |   |              |                                     |                 |          |          |          | 114        |            |                |          |          |          |          | $\Box$   | J        |           |
|              | 15       |          |          |               |              |              |          |            |   |           |          | 65         |  |          |   |              |                                     |                 |          |          |          | 115        |            |                |          |          |          |          | $\Box$   | $\Box$   |           |
|              | 16       |          |          |               |              |              |          |            |   |           |          | 66         |  |          | Ι   | I            |                                     |                 | $\Box$   |          |          | 116        |            |                |          |          |          |          | $\Box$   | $\Box$   |           |
|              | 17       |          |          |               |              |              |          | 匚          |   | $\Box$    |          | 67         |  | $\perp$  |   |              |                                     |                 |          |          |          | 117        |            |                |          |          |          |          | $\Box$   | $\Box$   |           |
|              | 18       |          |          |               |              |              |          |            |   |           |          | 68         |  |          |   |              |                                     |                 |          |          |          | 118        |            |                |          |          |          |          | _        | _        | _         |
|              | 19       | L        |          |               |              |              | L        | L          | Ш   | _         |          | 69         | $\sqcup$   | _        | _ _   |              |                                     |                 | _        | _        |          | 119        |            |                |          | $\Box$   |          |          | $\dashv$ | $\dashv$ |           |
|              | 20       | <u> </u> |          |               |              |              | L        | _          | Ш   | 4         |          | 70         |  | _        |   |              |                                     |                 |          | _        |          | 120        |            | Ш              |          |          |          |          | 4        | _        | _         |
| <u> </u>     | 21       | _        |          |               | Щ            |              | <u> </u> | <u> </u>   | Ш   | _         |          | 71         |  | _        | _   |              |                                     |                 | _        | _        | <u></u>  | 121        | lacksquare | Ш              |          |          | Ш        |          | 4        | $\dashv$ | ᆜ         |
|              | 22       |          | _        |               | _            | _            | _        | <u> </u>   | Ш   | _         |          | 72         | $\sqcup$   | +        | _   | -            | $\vdash$                            |                 | _        | _        | <u> </u> | 122        |            | Ш              |          |          |          |          | 4        | $\dashv$ | 4         |
|              | 23       | _        | _        | _             |              | _            | <u> </u> | <u> </u>   | Ш   | _         |          | 73         | $\sqcup$   | +        | +   | +            |                                     |                 | _        | _        | <u> </u> | 123        |            | Щ              |          |          | _        |          | -        | $\dashv$ | 긕         |
|              | 24       | -        | _        |               |              |              | <u> </u> | ├-         | Н   |           | $\vdash$ | 74         | $\vdash$   | +        | +   | +            | $\vdash$                            | $\square$       | +        |          | <u> </u> | 124        | $\vdash$   | Н              | _        |          |          |          | $\dashv$ | $\dashv$ | 긕         |
| $\vdash$     | 25       | _        |          |               | _            |              | _        | L          | Н   |           |          | 75         | $\vdash$   | - -      | +   | +-           | $\vdash$                            |                 | $\dashv$ | $\dashv$ | -        | 125<br>126 | _          | Н              |          | _        | -        |          | $\dashv$ | $\dashv$ | 긕         |
| <u> </u>     | 26<br>27 | _        |          |               |              | $\vdash$     | <u> </u> | $\vdash$   | Н   | $\dashv$  | -        | 76<br>77   | $\vdash$   | +        | +   | ╁            | ├                                   | $\dashv$        | -+       | -        | -        | 127        |            | Н              |          | -        | -        |          | $\dashv$ | $\dashv$ | ⊣         |
|              | 28       | -        |          |               | -            | -            |          | -          | Н   | $\dashv$  |          | 78         | $\vdash$   | +        | +   | +            | ├                                   | $\dashv$        | $\dashv$ | -        | -        | 128        | _          | Н              |          | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ | ᅱ         |
| $\vdash$     | 29       | -        | -        |               |              | -            |          | ⊢          | Н   | $\dashv$  | $\vdash$ | 79         | $\vdash$   | +        | +   | +            | $\vdash$                            | $\vdash$        | $\dashv$ | $\dashv$ |          | 129        |            | Н              |          |          | -        | -        | $\dashv$ | $\dashv$ | ᅱ         |
| $\vdash$     | 30       | $\vdash$ |          |               |              | -            | $\vdash$ | ⊢          | H   |           |          | 80         | $\vdash$   | +        | +-  |              | $\vdash$                            | $\vdash$        | -        | $\dashv$ |          | 130        | _          | Н              |          |          | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$  |
| H            | 31       | $\vdash$ |          |               |              | H            | $\vdash$ | -          | -   | $\dashv$  | -        | 81         | $\vdash$   | +        | ╅   | ╅╴           | $\vdash$                            |                 | _        | $\dashv$ |          | 131        | _          |                |          | $\dashv$ |          |          | $\dashv$ | $\dashv$ | $\dashv$  |
|              | 32       | $\vdash$ |          | _             | _            | $\vdash$     | _        | H          | Н   | $\dashv$  |          | 82         |  | ┪        | ╅   | -            | $\vdash$                            | -               | $\dashv$ | $\dashv$ |          | 132        |            | Н              |          |          |          | _        | $\dashv$ | $\dashv$ | $\neg$    |
|              | 33       | $\vdash$ |          | _             | $\vdash$     |              |          | Н          | Н   | $\dashv$  |          | 83         | $\vdash$   | ╅        | $\dashv$  | +            |                                     | $\vdash$        | $\dashv$ | $\dashv$ |          | 133        |            | Н              |          |          | Н        | $\vdash$ | $\dashv$ | $\dashv$ | ㅓ         |
|              | 34       | $\vdash$ |          |               |              |              | Г        | Г          | П   | $\dashv$  |          | 84         | H  | $\top$   | $\top$  | $\top$       | 1                                   | $\vdash$        | _        | $\dashv$ |          | 134        | $\Box$     | H              |          |          | П        |          | $\dashv$ | $\dashv$ | $\dashv$  |
|              | 35       | Г        |          |               |              |              | Г        | Г          | П   | $\exists$ |          | 85         | H  | 十        | $\top$  | 1            | Г                                   |                 | $\dashv$ | $\neg$   |          | 135        |            |                |          |          |          |          | $\neg$   | $\dashv$ | $\neg$    |
|              | 36       |          |          |               |              |              |          |            |   |           |          | 86         |  |          |   |              |                                     |                 |          |          |          | 136        |            |                |          |          |          |          | J        | $\Box$   |           |
|              | 37       |          |          |               |              |              |          |            |   |           |          | 87         |  |          | I   | $oxed{T}$    |                                     |                 |          |          |          | 137        |            |                |          |          |          |          | $\Box$   | $\Box$   |           |
|              | 38       |          |          |               |              |              |          |            |   |           |          | 88         |  | $\Box$   | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $oxed{\Box}$ |                                     |                 |          |          |          | 138        |            |                |          |          |          |          | $\Box$   | $\Box$   |           |
|              | 39       |          |          |               |              |              |          |            | Ш   |           |          | 89         | $\Box$   | $\perp$  |   |              |                                     |                 |          |          |          | 139        |            | $\Box$         |          |          |          |          | _[       | [        |           |
|              | 40       |          |          |               |              |              |          |            | $\Box$  |           |          | 90         | Ш  |          | $\perp$   |              |                                     | $oxed{oxed}$    |          | $\Box$   |          | 140        |            | Ш              | Ш        |          |          |          | $\perp$  | _        |           |
|              | 41       |          |          |               |              |              | L        | <u> </u>   | Ш   |           |          | 91         | Ц  |          | $\perp$   |              |                                     | Ш               |          |          | <u></u>  | 141        |            | Ш              |          |          |          |          | $\dashv$ | $\dashv$ |           |
|              | 42       | L        |          |               | Ш            | $oxed{\Box}$ | L        | L          | Ш   | _         |          | 92         | Ц  |          |   | _            | _                                   | oxdot           | _        |          | <u></u>  | 142        |            | Ш              | Ш        |          |          |          |          |          | $\Box$    |
| Ш            | 43       | _        |          |               | Ш            |              | _        | <u> </u>   | Ш   | _         |          | 93         | Ш  | 4        | 4   | $\bot$       | <u> </u>                            | Щ               | _        |          | <u> </u> | 143        |            | Ш              |          | _        |          |          | _        | _        | _         |
| $oxed{oxed}$ | 44       | _        | Ш        |               | Ш            | Щ            |          | <u> </u>   | Ш   | _         |          | 94         | $\sqcup$   | 4        | +   | ╁-           | <u> </u>                            | $\sqcup$        | _        | _        | <b> </b> | 144        |            | Ш              | $\sqcup$ | _        |          | $\sqcup$ | 4        |          |           |
|              | 45       | <u> </u> | Ш        |               | L            | $\vdash$     | <u> </u> | <u> </u>   | Щ   | _         | $\vdash$ | 95         | $\dashv$   | -        | +   | +            | -                                   | $\vdash \vdash$ | _        | _        | <u> </u> | 145        | $\square$  | Ш              |          | _        |          |          | -        | -        | _         |
|              | 46       | <u> </u> | Ш        | _             | $\vdash$     | $\vdash$     | $\vdash$ | <u> </u>   | Н   |           | -        | 96         | $\dashv$   | +        | +   | +-           | $\vdash$                            | dash            | $\dashv$ | $\dashv$ | $\vdash$ | 146        | Щ          | Ш              | Н        |          | $\vdash$ |          | -        | $\dashv$ | $\dashv$  |
|              | 47       | <u> </u> | Н        |               | Н            | $\vdash$     | <u> </u> | $\vdash$   | Н   | $\dashv$  |          | 97         | $\vdash \downarrow$  | +        | +   | +            | -                                   | $\vdash$        | -        | $\dashv$ | <b>—</b> | 147        |            | $\vdash$       | H        |          | $\vdash$ |          | $\dashv$ | -        | $\dashv$  |
|              | 48       | <u> </u> | Н        |               | Н            | Н            | $\vdash$ | $\vdash$   | Н   |           | -        | 98<br>99   | $\vdash \vdash$  | +        | +   | +            | -                                   | $\vdash \vdash$ | $\dashv$ | $\dashv$ | -        | 148        | -          | $\vdash\vdash$ | $\vdash$ |          | $\vdash$ |          | $\dashv$ | $\dashv$ | $\dashv$  |
|              | 49<br>50 | ⊢        | Н        | -             | $\vdash$     | $\vdash$     | ⊢        | -          | $\vdash$  |           | $\vdash$ | 100        | $\vdash \downarrow$  | +        | +   | +            | -                                   | $\vdash$        | $\dashv$ | $\dashv$ | $\vdash$ | 149<br>150 | $\vdash$   | $\vdash$       | $\vdash$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  |
|              | ου       | Ш.       | L        | L             |              |              |          |            | $oldsymbol{ol}}}}}}}}}}}}}}}}}}}$ |           |          | 100        | $oldsymbol{ol}oldsymbol{ol}oldsymbol{ol}}}}}}}}}}}}}}}}}}$ |          | i_  |              |                                     |                 |          |          |          | 130        |            | oxdot          | ليا      |          |          |          | L        |          |           |